

## CLAIMS

1. A segregated user interface for parameter configuration in a multi-path failover system, comprising:

5 a user interface module capable of receiving configuration parameters for a multi-path failover system from a user; and

10 an object module capable of receiving the configuration parameters from the user interface module, wherein the object module is capable of detecting a current controller status of a controller and a current device status of a device, and wherein the object module is further capable of configuring a failover driver using the received configuration parameters.

2. A segregated user interface as recited in claim 1, wherein the user interface module is capable of displaying the current controller status and the current device status.

15 3. A segregated user interface as recited in claim 1, wherein the received configuration parameters include logical unit number (LUN) masking parameters.

4. A segregated user interface as recited in claim 3, wherein the LUN masking parameters include a LUN masking without input/output (I/O) request blocking.

pubA5

5. A segregated user interface as recited in claim 4, wherein the LUN masking parameters include a LUN masking with I/O request blocking.

5 6. A segregated user interface as recited in claim 1, wherein the object module is capable of disabling and enabling failover features for a particular data path.

7. A segregated user interface as recited in claim 6, wherein the failover features represent an ability to reroute an I/O request destined for a particular I/O device when a primary data path to the I/O device has failed.

8. A method for configuring parameters in a multi-path failover system, comprising the operations of:

detecting a current controller status of a controller and the current device status of a device;

displaying the current controller status and the current device status to a user;

receiving configuration parameters for a multi-path failover system from the user, the configuration parameters including logical unit number (LUN) masking parameters; and

Pub A5

configuring a failover driver using the received configuration parameters.

9. A method as recited in claim 8, wherein the LUN masking parameters include a LUN masking without input/output (I/O) request blocking.

5

10. A method as recited in claim 9, wherein the LUN masking parameters include a LUN masking with I/O request blocking.

10

11. A method as recited in claim 10, wherein the failover driver rejects all I/O requests destined for a device having a LUN masking with I/O request blocking.

12. A method as recited in claim 11, wherein a device having a LUN masking parameter is hidden from an operating system.

15

13. A method as recited in claim 8, further comprising the operation of disabling and enabling failover features for a particular data path.

Pub 15

14. A method as recited in claim 13, wherein the failover features represent an ability to reroute an I/O request destined for a particular I/O device when a primary data path to the I/O device has failed.

5 15. A system for configuring parameters in a multi-path failover system, comprising:

a user interface module capable of receiving configuration parameters for a multi-path failover system from a user;

10 an object module capable of receiving the configuration parameters from the user interface module, wherein the object module is capable of detecting a current controller status of a controller and the current device status of a device; and

a failover driver in communication with the object module, wherein the failover driver is capable of receiving the configuration parameters from the object module, wherein the failover driver is configured using the received configuration parameters.

15 16. A system as recited in claim 15, wherein the user interface module is capable of displaying the current controller status and the current device status.

20 17. A system as recited in claim 15, wherein the configuration parameters include logical unit number (LUN) masking parameters.

sub A5

18. A system as recited in claim 17, wherein the LUN masking parameters include a LUN masking without input/output (I/O) request blocking.

5 19. A system as recited in claim 18, wherein the LUN masking parameters include a LUN masking with I/O request blocking.

10 20. A system as recited in claim 15, wherein the failover driver is capable of receiving disable and enable failover parameters for a particular data path from the object module.

15 21. A system as recited in claim 20, wherein the failover driver reroutes I/O requests destined for a particular I/O device when a primary data path to the I/O device has failed in response to receiving an enable failover parameter.

22. A segregated user interface for parameter configuration in a multi-path failover system, comprising:

a user interface module capable of receiving configuration parameters for a multi-path failover system from a user, the user interface module further capable of displaying a  
20 current controller status and a current device status; and

pub 15

an object module capable of receiving the configuration parameters from the user interface module, wherein the object module is capable of detecting a current controller status of a controller and the current device status of a device, and wherein the object module is further capable of configuring a failover driver using the received configuration parameters, wherein the configuration parameters include a LUN masking without input/output (I/O) request blocking parameter and a LUN masking with I/O request blocking parameter.

23. A segregated user interface as recited in claim 22, wherein the object module is capable of disabling and enabling failover features for a particular data path.

24. A segregated user interface as recited in claim 23, wherein the failover features represent an ability to reroute an I/O request destined for a particular I/O device when a primary data path to the I/O device has failed.

25. A method for configuring parameters in a multi-path failover system, comprising the operations of:

detecting a current controller status of a controller and the current device status of a device;

displaying the current controller status and the current device status to a user;

Pub 1.5

receiving configuration parameters for a multi-path failover system from the user, the configuration parameters including a LUN masking without input/output (I/O) request blocking parameter and a LUN masking with I/O request blocking parameter; and

5 configuring a failover driver using the received configuration parameters such that the failover driver rejects all I/O requests destined for a device having a LUN masking with I/O request blocking, and wherein a device having a LUN masking parameter is hidden from an operating system.

10 26. A method as recited in claim 25, further comprising the operation of disabling and enabling failover features for a particular data path.

27. A method as recited in claim 26, wherein the failover features represent an ability to reroute an I/O request destined for a particular I/O device when a primary data path to the I/O device has failed.

15

28. A system for configuring parameters in a multi-path failover system, comprising:

a user interface module capable of receiving configuration parameters for a multi-path failover system from a user, the user interface module further capable of displaying a  
20 current controller status and a current device status; and

Pub AS

an object module capable of receiving the configuration parameters from the user interface module, wherein the object module is capable of detecting a current controller status of a controller and the current device status of a device, wherein the configuration parameters include a LUN masking without input/output (I/O) request blocking parameter and a LUN masking with I/O request blocking parameter; and

a failover driver in communication with the object module, wherein the failover driver is capable of receiving the configuration parameters from the object module, wherein the failover driver is configured using the received configuration parameters.

29. A system as recited in claim 28, wherein the failover driver is capable of receiving disable and enable failover parameters for a particular data path from the object module.

30. A system as recited in claim 29, wherein the failover driver reroutes I/O requests destined for a particular I/O device when a primary data path to the I/O device has failed in response to receiving an enable failover parameter.

31. A method for providing an interface to a failover driver, comprising the operations of:



pubA5

providing a segregated user interface, the segregated user interface having a front end to receive user commands and a back end to provide configuration commands to a failover driver

5           32.    A method as recited in claim 31, wherein the configuration parameters include logical unit number (LUN) masking parameters.

33.    A method as recited in claim 32, wherein the LUN masking parameters include a LUN masking without input/output (I/O) request blocking.

10

34.    A method as recited in claim 33, wherein the LUN masking parameters include a LUN masking with I/O request blocking.

09768860-01201